

# BACKPACK SPRAYER

12 VOLT - 4.8 GAL. CAPACITY

Model 94573

## SET UP AND OPERATING INSTRUCTIONS



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Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

Manual Revised 10d

#### **SAVE THIS MANUAL**

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

# **IMPORTANT SAFETY** INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

**DANGER** indicates a **A DANGER** hazardous situation which, if not avoided, will result in death or serious injury.

WARNING indicates a **AWARNING** hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION, used with **ACAUTION** the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

**CAUTION**, without the safety alert symbol, is used to address practices not related to personal injury.

#### **GENERAL SAFETY RULES**



WARNING Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious

Save all warnings and instructions for future reference.

#### **WORK AREA**

- Keep your work area clean and well 1. lit. Cluttered and dark work areas invite accidents.
- 2. Keep bystanders, children, and visitors away while operating the Sprayer. Distractions can cause you to lose control.

## **PERSONAL SAFETY**

- 1. **Stay alert.** Watch what you are doing, and use common sense when operating a power tool. Do not use the Sprayer while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly.** Do not wear loose 2. clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

- 3. **Do not overreach.** Keep proper footing and balance at all times. Proper footing and balance enables better control of the Sprayer in unexpected situations.
- 4. Wear eye, breathing, and skin protection. Wear ANSI approved safety impact goggles, a NIOSH-approved respirator, latex gloves, and proper safety clothing when using this product.

#### **TOOL USE AND CARE**

- Do not force the Sprayer. Use the correct product for your application. The correct product will do the job better and safer at the rate for which it is designed.
- Store idle tools and equipment out of reach of children and other untrained people. Tools and equipment are dangerous in the hands of untrained users.
- Maintain the Sprayer with care.
  Keep this product clean. A properly
  maintained tool is easier to control. Do
  not use damaged tools and equipment.
  Tag damaged tools and equipment "Do
  not use" until repaired.
- 4. Check for misalignment or binding of moving parts, loose or broken parts, and any other condition that may affect the Sprayer's operation. If damaged, have the Sprayer serviced before using. Many accidents are caused by poorly maintained tools and equipment.
- 5. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one product may become hazardous when used on another product.

#### **SERVICE**

- Product service must be performed only by qualified service technician.
   Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 2. When servicing the Sprayer, use only identical replacement parts.
  Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

#### **SPECIFIC SAFETY RULES**

- Maintain labels and nameplates on the Sprayer. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 2. **Use the right product for the job.**There are certain applications for which this product was designed. Do not use small tools, equipment, or attachments to do the work of larger industrial tools, equipment, or attachments. Do not use this product for a purpose for which it was not intended.
- 3. Industrial applications must follow OSHA requirements.
- 4. **Store idle tools.** When not in use, store the Sprayer in a clean, dry, safe location out of reach of children.
- 5. This Sprayer is intended to be used only with water, liquid fertilizers, liquid herbicides, and liquid pesticides. Never attempt to spray flammable, combustible, or corrosive liquids with the Sprayer.

- 6. Always follow all chemical label precautions and local EPA regulations when using liquid chemicals. Do not touch harmful chemicals. After use, clean the Sprayer thoroughly with agents recommended by the chemical manufacturer.
- 7. Never point the nozzle of the Spray Gun Assembly at yourself, other people, pets and animals, or property.
- 8. A note on Chemicals disposal: Never attempt to burn unused fertilizers, herbicides, pesticides, or any other types of chemicals. Make sure to check with your local solid waste authorities for proper disposal procedures.
- 9. Always make sure children and animals do not have access to chemically treated areas.
- Dry running will cause damage to the inner seals. Make sure the water or liquid chemical supply used for the Sprayer is not dirty or sandy.
- 11. Do not pull or carry the Sprayer by its Spray Gun Assembly. Use the Handle on the Sprayer to move the tool from one location to another.
- 12. The work area should have adequate drainage to reduce the possibility of a fall due to slippery surfaces.
- 13. This product is designed for outdoor use only.
- 14. Keep the Cap and Spray Gun
  Assembly of the Sprayer connected
  to the tool while the system is
  pressurized. Prior to refilling or
  emptying the Tank, squeeze the
  Trigger on the Spray Gun Assembly to
  completely depressurize the system.
- 15. Prior to starting the Sprayer in cold weather, check all of the parts of

- the tool to make sure ice has not formed. Do not store the Sprayer where the temperature will fall below 32° Fahrenheit.
- 16. Do not keep water or any liquid chemicals in the Sprayer after use.
- 17. Make sure to clean the Filter of the Sprayer before each use.
- 18. Never leave the Sprayer unattended. When finished using the Sprayer, empty the unit. Thoroughly clean the unit and store it in a clean, dry, safe location out of reach of children.
- 19. The warnings and cautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
- 20. People with pacemakers should consult their physician(s) before using this product. Electromagnetic fields in close proximity to a heart pacemaker could cause interference to or failure of the pacemaker.

#### SAVE THESE INSTRUCTIONS

#### **GROUNDING**



TO PREVENT ELECTRIC SHOCK

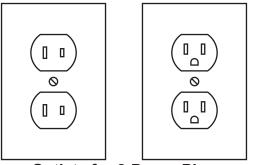
AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:



Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use

the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

# Double Insulated Tools: Tools with <u>Two Prong Plugs</u>



**Outlets for 2-Prong Plug** 

- Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. (See Outlets for 2-Prong Plug.)
- Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. (See Outlets for 2-Prong Plug.)

### **Extension Cords**

**Note:** Extension cords must not be used with this item's charger.

# **Symbology**

	Double Insulated
<b>(1)</b>	Canadian Standards Association
(UL)	Underwriters Laboratories, Inc.
V~	Volts Alternating Current
Α	Amperes
n <sub>0</sub> xxxx/min.	No Load Revolutions per Minute (RPM)

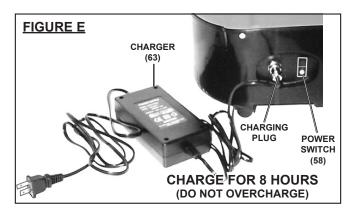
SPECIFICATIONS				
Charger Input	120 V~ / 60 Hz			
Charger Output	12 VDC			
Battery Type	Rechargeable 12V / 10 Ah			
Charge Time	8 Hours			
Charger Cord/Plug				
Spray Time Output	Approximately 9 to 10 Hours			
	(Full Charge)			
Tank Capacity	4.8 Gallons			
Flow Rating	0.7 Gallons Per Minute			
Maximum	65 PSI			
Pressure				
Unit Dimensions	7" Long x 15" Wide x 23-5/8" High			
Spray Rod	28" Long x 3/8" Diameter			
Dimensions				
Unit Weight	17.5 lb.			
(Empty)				
Accessories	Conical Mist Nozzle			
	Four Hole Adjustable Nozzle			
	Mist Nozzle / 30° Dual Nozzle			
Additional	Diaphragm Pump			
Features	Triple Screen Water Filtration			

#### **UNPACKING**

When unpacking, make sure all that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at 1-800-444-3353 as soon as possible.

#### **CHARGING INSTRUCTIONS**

 The Battery (51) for the Sprayer must be fully charged before using the tool. When charging for the *first* time, and all subsequent charges, the charge time is 8 hours. Never charge the Battery (51) for longer than 8 hours, as damage to the Battery and/or Sprayer will occur.



- To charge the Battery (51), Turn the Power Switch (58) to its "OFF" position. (See Figure E.)
- 3. Insert the chrome Charging Plug of the Charger (63) into the Charging Receptacle of the Sprayer. Make sure to screw the chrome Charging Plug onto the Receptacle *firmly*. (See Figure E.)
- 4. Plug the Power Cord Plug of the Charger (63) into the nearest, 120 volt, grounded, electrical outlet. (See Figure E.)
- 5. Charge the Battery (51) for 8 hours.

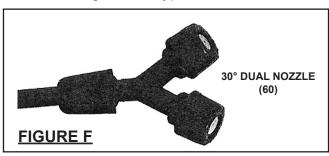
  IMPORTANT: The Charger (63) will not automatically shut off when the Battery (51) is fully charged. Avoid Battery/ tool damage by removing power to the Charger at the end of 8 hours charge time. (See Figure E.)
- Keep children and pets away from the Battery while it is charging. Regularly check the Battery to make sure it is charging properly.
- 7. When finished charging, disconnect the Charger (63) from the electrical outlet. Then, unscrew and remove the chrome Charging Plug of the Charger (63) from the Charging Receptacle of the Sprayer. (See Figure E.)
- 8. On a full charge, the Sprayer will operate approximately **9 to 10 hours**.

# ASSEMBLY AND OPERATING INSTRUCTIONS

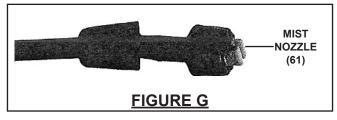
<u>CAUTION!</u> Wear eye, breathing, and skin protection. Wear ANSI-approved safety impact goggles, a NIOSH-approved respirator, latex gloves, and proper safety clothing when using this product.

# **Nozzle Selection And Assembly:**

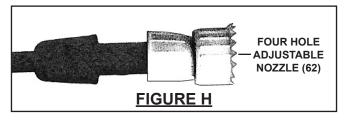
1. The Sprayer is equipped with the following Nozzle types:



a. 30° Dual Nozzle (60): Designed for wider spray areas on short crops and the spraying of herbicides and pesticides. Follow the wind and move in a parallel manner on one side while spraying. (See Figure F.)



 b. Mist Nozzle (61): Designed for narrow spray areas on low crops and the spraying of herbicides and pesticides. Follow the wind and move in a parallel manner on one side while spraying. (See Figure G.)



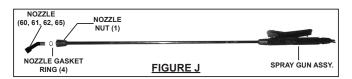
c. Four Hole Adjustable Nozzle (62):

Designed for spraying high crops and fruit trees and the spraying of pesticides. However, the Adjustable Nozzle may result in significant overspray of pesticides.

(See Figure H.)

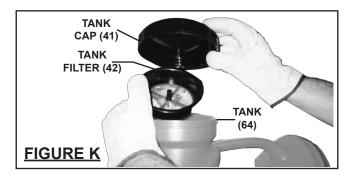


d. Conical Mist Nozzle (65): Designed for spraying low crops and the spraying of herbicides and pesticides. Allows for a conical spray pattern. Follow the wind and move in a parallel manner on one side while spraying. (See Figure I.)



2. To attach a Nozzle (60, 61, 62, 65) to the Spray Gun, check to make sure the Nozzle Gasket Ring (4) is properly seated in the Nozzle Nut (1). Then, screw the desired Nozzle into the Nozzle Nut. (See Figure J.)

### To Fill The Tank:

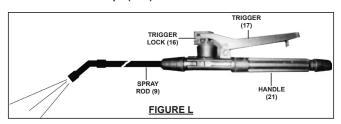


- Prior to filling the Tank (64) of the Sprayer with liquid, remove the Tank Cap (41) and check to make sure the Tank Filter (42) is clear of dirt and debris. If necessary, remove the Filter and thoroughly clean. (See Figure K.)
- 2. Next, insert the Tank Filter back into the opening of the Tank.
- 3. Fill the Tank with up to 4.8 gallons of liquid. Then, replace the Tank Cap on the Tank.

#### To Operate The Sprayer:

**CAUTION!** Make sure other adults, children, and animals do not have access to the spray area(s).

**NOTE:** The Sprayer is heavy when completely filled with liquid. Strap the Sprayer on with assistance. Adjust the Back Strap (45) as needed.



- Grip the Handle (21) of the Spray Gun Assembly firmly. Then, turn the Power Switch (58) to its "ON" position. (See Figures E and L.)
- 2. Point the Nozzle (60, 61, 62) of the Spray Gun Assembly toward the area to

be sprayed. Then, squeeze the Trigger to begin spraying. (See Figure L.)

- NOTE: The Trigger (17) of the Spray Gun
  Assembly may be locked in a continuous
  run position with the Trigger Lock
  (16). To do so, move the Trigger Lock
  backward toward the Handle (21). To
  return to manual operation, move the
  Trigger Lock forward toward the Spray
  Rod (9). (See Figure L.)
- As you spray, the system will begin to depressurize. When the distance of the spray diminishes you will need to stop spraying momentarily. Allow the Sprayer to re-pressurize its system before spraying again.
- 4. If it becomes necessary to refill the Tank (64) of the Sprayer, turn the Power Switch (58) to its "OFF" position.
  Continue squeezing the Trigger (17) on the Spray Gun Assembly to completely de-pressurize the system. Remove the Tank Cap (41) from the Tank. Check to make sure the Tank Filter (42) is clear of dirt and debris. Refill the Tank with liquid, and replace the Tank Cap. Turn the Power Switch to its "ON" position to pressurize the system, and continue spraying. (See Figures E and K.)
- 5. When finished spraying, turn the Power Switch (58) to its "OFF" position.
  Continue squeezing the Trigger (17) on the Spray Gun Assembly to completely depressurize the system. Remove the Tank Cap (41) from the Tank (64), and empty any remaining liquid into a safe and secure container. Clean the Sprayer thoroughly with agents recommended by the chemical manufacturer. Allow the unit to air-dry. Replace the Tank Cap (41), and store the Sprayer in a clean, dry, safe location out of reach of children and other unauthorized people.

# INSPECTION, MAINTENANCE, AND CLEANING

- CAUTION! Make sure the Power Switch (58) is in its "OFF" position and unplugged from its Charger (63). Then, de-pressurize the system before performing any inspection, maintenance, or cleaning of the Sprayer.
- 1. **Before each use,** inspect the general condition of the Sprayer. Check for misalignment or binding of moving parts, damaged or loose parts, dirt or debris in the Filter and Nozzle, damaged electrical wiring, and any other condition that may affect the tool's safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
- To clean: If using liquid chemicals, flush the interior and clean the exterior of the Sprayer and its Spray Gun Assembly thoroughly with cleaning agents recommended by the chemical manufacturer. Then, allow to air-dry. Do not use solvents.
- 3. When storing: Always completely empty the Sprayer of liquid. Frost will damage the Sprayer if the unit contains liquid. Store the Sprayer in an indoor area such as a garage or shed. Make sure to store the Sprayer and any chemicals in a safe, dry, clean location out of reach of children and other unauthorized people.
- CAUTION! All maintenance, service, and repairs not discussed in this manual should only be performed by a qualified service technician.

## **TROUBLESHOOTING**

Problem	Possible Solution
Unit does not spray.	Fully charge the battery.
	2. Fill the tank.
	3. Firmly tighten the Tank Cap and secure all connections on the tank and the spray gun assembly.
	4. Clear the Nozzle on the Spray Gun assembly of dirt and debris.
The spray pattern is undesirable.	Use the proper Nozzle for the job at hand.
	2. Clear the Nozzle on the Spray Gun assembly of dirt and debris.

#### PLEASE READ THE FOLLOWING CAREFULLY

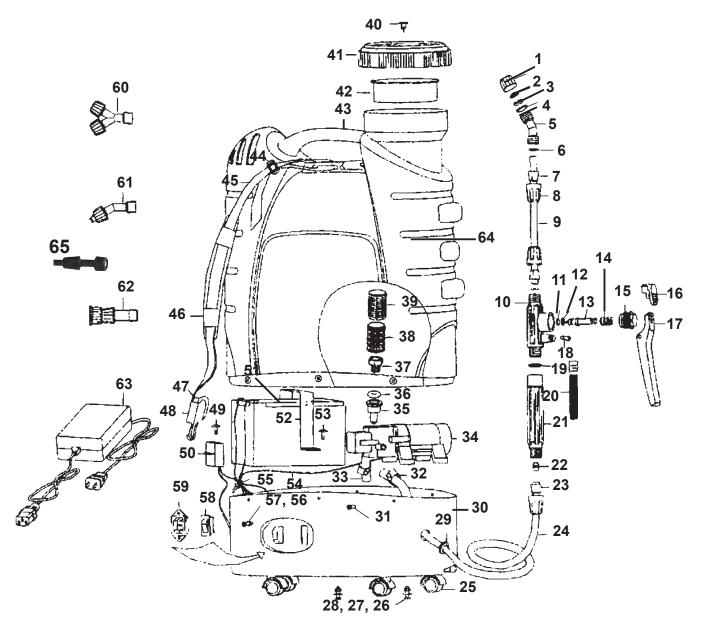
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# **PARTS LIST**

Dest	Daniel Co.	101
Part	Description	Qty.
11	Nozzle Nut	1 1
2	Conical Mist Spraying Sheet	1
3	Splitting Sheet	1
4	Nozzle Gasket Ring	1
5	Elbow	1
6	Spray Rod O-Ring	2
7	Opening Cover	2
8	Spray Rod Nut	3
9	Spray Rod	1
10	Switch Main Unit	1
11	Switch Gasket	1
12	Valve Cartridge O-Ring	1
13	Valve Cartridge	1
14	Spring	1
15	Switch Nut	1
16	Trigger Lock	1
17	Trigger	1
18	Switch Pin	1
19	Handle Gasket Ring	1
20	Switch Filter Screen	1
21	Handle	1
22	Opening Cover	1
23	Tube Sleeve	1
24	Hose	1
25	Caster	4
26	Screw (M5 x 20)	4
27	Flat Washer (#5)	4
28	Nut (M5)	4
29	Protection Cover	1
30	Base	1
31	Countersink Screw (M5 x 15)	1
32	Tube Clamp	1
33	Inlet Tube	1

Part	Description	Qty.
34	Mini-Pump	1
35	Tube Coupling	1
36	O-Ring	1
37	Inlet Coupling	1
38	Screen Frame	1
39	Screen Cover	1
40	Vent Valve	1
41	Tank Cap	1
42	Tank Filter	1
43	Barrel	1
44	Strap Clamp	2
45	Back Strap	2
46	Shoulder Cushion	2 2 2 2 2 1
47	Strap Button	2
48	Strap Hook	2
49	Self Tapping Screw (3.7 x 10)	
50	Alarm	1
51	Battery	1
52	Anchor Ear	1
53	Self Tapping Screw (3.7 x 18)	7
54	Power Cable	
55	Nylon Tier	3
56	Countersink Screw (M3 x 10)	3 2 2
57	Nut (M3)	
58	Power Switch	1
59	Socket	1
60	Dual Nozzle	1
61	Mist Nozzle	1
62	Adjustable Nozzle	1
63	Charger	1
64	Tank	1
65	Conical Mist Nozzle	1

# **ASSEMBLY DIAGRAM**



**NOTE:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.